

CLAIMS

What is claimed is:

1. A process for preparing a paste-extruded sulfonamide herbicide composition comprising

5 (a) preparing a mixture comprising

(i) from 2 to 90% by weight on a water-free basis of one or more active ingredients comprising at least one sulfonamide herbicide free acid;

10 (ii) from 0 to 95% by weight on a water-free basis of one or more additives selected from the group consisting of wetting agents, dispersants, lubricants, anticaking agents, chemical stabilizers and diluents; and

(iii) at least about 50 equivalent % of base selected from inorganic base equivalents having conjugate acid pK_a s at least 2.1 units greater than the highest pK_a of the sulfonamide herbicide free acid component;

15 the sum of the weight percents of all the ingredients in the mixture totaling 100% on a water-free basis; and

(iv) sufficient water to make the mixture an extrudable paste;

(b) extruding the mixture prepared in (a) through a die or screen to form extrudate; and

(c) drying the extrudate.

20 2. The process of Claim 1 wherein the mixture comprises at least about 75 equivalent % of base.

3. The process of Claim 2 wherein the mixture comprises at least about 100 equivalent % of base.

25 4. The process of Claim 1 wherein the base comprises an inorganic base selected from the group consisting of sodium hydrogen carbonate, sodium carbonate, sodium hydrogen phosphate, sodium phosphate, potassium hydrogen carbonate, potassium carbonate, potassium hydrogen phosphate and potassium phosphate.

5. The process of Claim 4 wherein the base comprises an inorganic base selected from the group consisting of sodium carbonate, sodium phosphate, potassium carbonate and potassium phosphate.

30 6. The process of Claim 5 wherein the base comprises sodium carbonate.

7. The process of Claim 5 wherein the base comprises sodium phosphate.

8. The process of Claim 7 wherein the sodium phosphate is in the form of the dodecahydrate.

9. The process of Claim 1 wherein the mixture comprises from about 0.5 to about 50% by weight of a saccharide on a water-free basis.

10. The process of Claim 1 wherein at least one sulfonamide herbicide free acid is selected from the group consisting of amidosulfuron, azimsulfuron, bensulfuron-methyl, chlorimuron-ethyl, chlorsulfuron, cinosulfuron, cyclosulfamuron, ethametsulfuron-methyl, 5 ethoxysulfuron, flupyrsulfuron-methyl, flazasulfuron, foramsulfuron, halosulfuron-methyl, imazosulfuron, iodosulfuron-methyl, mesosulfuron-methyl, metsulfuron-methyl, nicosulfuron, oxasulfuron, primisulfuron-methyl, prosulfuron, pyrazosulfuron-ethyl, rimsulfuron, sulfometuron-methyl, sulfosulfuron, thifensulfuron-methyl, triasulfuron, 10 tribenuron-methyl, trifloxysulfuron, triflusulfuron-methyl, tritosulfuron, cloransulam-methyl, diclosulam, florasulam, flumetsulam, metosulam and penoxsulam.

11. The process of Claim 10 wherein at least one sulfonamide herbicide free acid is selected from the group consisting of azimsulfuron, bensulfuron-methyl, chlorimuron-ethyl, chlorsulfuron, ethametsulfuron-methyl, flupyrsulfuron-methyl, metsulfuron-methyl, 15 nicosulfuron, rimsulfuron, sulfometuron-methyl, thifensulfuron-methyl, tribenuron-methyl and triflusulfuron-methyl.

12. The process of Claim 1 wherein at least one sulfonamide herbicide free acid is sulfometuron-methyl and the base comprises sodium phosphate.

13. The process of Claim 1 wherein at least one sulfonamide herbicide free acid is 20 thifensulfuron-methyl and the base comprises sodium carbonate.

14. The process of Claim 1 wherein at least one sulfonamide herbicide free acid is tribenuron-methyl and the base comprises sodium carbonate.

15. The process of Claim 1 wherein in (a) sufficient water to make an extrudable paste is added to a solid composition comprising from 2 to 90% by weight on a water-free 25 basis of one or more active ingredients comprising at least one sulfonamide herbicide free acid, from 0.5 to 94% by weight on a water-free basis of a saccharide, from 1 to 20% by weight on a water-free basis of surfactant component, at least about 50 equivalent % of base selected from inorganic base equivalents having conjugate acid pK_a s at least 2.1 units greater than the highest pK_a of the sulfonamide herbicide free acid component, and 30 optionally other ingredients; the sum of the weight % of all the ingredients in the solid composition totaling 100% of a water-free basis; and at least 10% of the sulfonamide herbicide content in the solid composition being in free acid form.

16. The process of Claim 1 further comprising a step of sifting the dried extrudate.

17. A paste-extruded sulfonamide herbicide composition prepared by the process of 35 Claim 1.